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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/089,583 | 06/03/1998 | KENNETH M. WEISMAN | W1068/20011 | 2991 |

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| EXAMINER | |
|---|---|
| OWENS JR, HOWARD V | |
| **ART UNIT** | **PAPER NUMBER** |
| 1623 | |

DATE MAILED: 08/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 09/089,583 | Applicant(s) WEISMAN ET AL. | |
|---|---|---|---|
| | Examiner Howard V Owens | Art Unit 1623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3,5-13,16,17,19,20,22,23,25,27 and 28* is/are allowed.

6)☒ Claim(s) *1,2,4,14,15,18,21,24,26 and 29* is/are rejected.

7)☒ Claim(s) *2 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

The following is in response to the request for continued examination filed 3/05/02:

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(a) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/30/01 has been entered.

### ***Claim Objections***

For clarity, use of the abbreviations LHRH or GnRH in claims 2 and 17 while accepted art abbreviations should be set forth initially as the full written terms (said abbreviations are intended to represent).

Abstract Objected to: Minor Informalities

The Abstract of the Disclosure is objected to because applicant's use of the term "substance" in the abstract is too nonspecific and does not provide the general nature of the compound or class of compounds.

Applicant is reminded of the proper content of an Abstract of the Disclosure.

In chemical patent abstracts, compounds or compositions, the general nature of the compound or composition should be given as well as its use, *e.g.*, "The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics." Exemplification of a species could be illustrative of members of the class. For processes, the type reaction, reagents and process conditions should be stated, generally illustrated by a single example unless variations are necessary. Complete revision of the content of the abstract is required on a separate sheet.

Trademarks and Their Use

The use of the trademarks ZOLADEX and CASODEX have been noted in this application. These and other trademarks not noted should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CAR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CAR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CAR 3.73(b).

Claims 15, 18 and 29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Patent No. 6, 197,337('337). An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claims(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010(Fed. Cir. 1993). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 15, 18 and 29 are generic to all that is recited in claims 1 and 4 of '337. That is, claims 1 and 4 fall entirely within the scope of claims 15, 18 and 29. Specifically, the method of decreasing atherosclerosis and its complications through the administration of a specific testosterone inhibitor/antiandrogen, Abarelix, falls within the scope of the methods set forth in claims 15, 18 and 29 to decrease atherosclerosis and its complications through the administration of a testosterone inhibitor/antiandrogen.

## ***Claim Rejections - 35 USC § 112***

112(1)

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 4, 14, 15, 18, 29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The instant specification invites the skilled artisan to experiment. The factors which must be considered in determining undue experimentation are set forth in In re Wands 8USPQ 2d 1400. The factors include:

1) quantity of experimentation necessary,
2) the amount of guidance presented,
3) the presence or absence of working examples,
4) the nature of the invention,
5) the state of the prior art,
6) the predictability of the art,
7) breath of the claims and the
8) level of skill in the art.

Quantity of experimentation necessary, Amount of guidance presented, Presence or absence ofworking examples

Claims 1, 2, 4, 14, 15, 18, 29 are drawn to a method of decreasing atherosclerosis and its complications comprising administering an amount of a substance which acts to decrease or inhibit the levels of testosterone or non-steroidal antiandrogen. decreasing atherosclerosis and its complications via administration of finasteride, inhibitors of LHRH or GnRH, bicalutamide, flutamide and nilutamide.

Applicant provides guidance via a retrospective questionaire wherein patients administered with agents such as finasteride, inhibitors of LHRH or GnRH, bicalutamide, flutamide and nilutamide reported fewer heart attacks; however, applicant has not provided support commensurate to a claim of "any substance" which inhibits levels of testosterone or non-steroidal antiandrogen being correlative to a reduction in atherosclerosis or myocardial infarction. In cases involving unpredictable factors, such as most chemical reactions and physiological activity, scope of enablement varies inversely with degree of unpredictability of factors involved. There is no data wherein radiologic or diagnostic tools were employed to show, with regards to blood flow rates or angiograms, that either atherosclerotic conditions were present prior to the study or that there was a clear correlation between the administration of a broad class of inhibitors of testosterone/an androgen and a reduction in atherosclerosis.

Predictability of the art/State of the art

The state of the art of cardiology is such that there are many factors leading to atherosclerosis or myocardial infarction, for instance diet has a significant role in

atherosclerosis. In the data presented to the patent office on 11/12/1999, applicant provides data on the incidence of certain accepted risk factors between the control group and those administered with an inhibitor of testosterone or an androgen; however, one accepted risk factor that was not reported nor considered was that of diet. According to Goodman and Gilman's The Pharmaceutical Basis of Therapeutics, interpatient and intrapatient variation in disposition of a drug must be taken into account in choosing a drug regimen. Different individuals vary in the magnitude of their response to the same concentration of a single drug or to similar drugs when the appropriate correction has been made for differences in potency, maximal efficacy and slope (pp 65-68).

The prior art indicates that climacteric disorders during aging in males such as increased incidence of cardiovascular diseases may be associated with the reduction in testosterone or steroid precursor levels (U.S. Patent No. 5872114, col.3-col.4; U.S. Patent no. 5,906,987, col. 1-col.2). Thus the state of the art requires a well designed and well executed clinical trial wherein homogenous populations of patients must be selected and appropriate control groups found are utilized in order to show data which teaches away from that which has been established in the prior art. The instant specification does not take into consideration that the difference in heart attack rates by the patients may be attributed to diet especially since the patients weren't monitored or controlled for their dietary intake prior to the administration of the questionnaire.

Applicant does not provide commensurate data on a broad range of compounds that inhibit testosterone and show a decrease in an existing condition of atherosclerosis or the prevention of the onset of atherosclerosis. Since applicant has not clearly established that the reduction in atherosclerosis may be accomplished by a broad number of testosterone inhibitors, it is not evident that one of skill in the art may rely upon the administration of any testosterone inhibitor to reduce the incidence of atherosclerosis.

**112(2)**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21, 24 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21, 24 and 26 recites the limitation "bicalutamide" or “nilutamide” in claim 15 . There is insufficient antecedent basis for this limitation in the claim . Neither "bicalutamide" or “nilutamide” are set forth initially in claim 15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (703) 306-4538 . The examiner can normally be reached on Mon.-Fri. from 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Primary Examiner signing this action, James O. Wilson can be reached on (703) 308-4624 . The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

Howard Owens

Group 1623

JAMES O. WILSON
PRIMARY EXAMINER
GROUP 1600